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EXAMINER	
POKRZYWA, JOSEPH R	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/195,604	TOMIDOKORO ET AL.	
	Examiner	Art Unit	
	Joseph R. Pokrzywa	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7 and 30-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7 and 30-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed on 3/28/05 in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 10/25/04 has been entered.

Response to Amendment

2. Applicant's amendment received on 10/25/04 has been entered and made of record. Currently, **claims 1-7 and 30-36** are pending.

Response to Arguments

3. The arguments filed on 10/25/04 were addressed in the Office action dated 2/28/05. For completeness, the response to those arguments will be repeated below.

4. In response to applicant's arguments regarding the rejection of **claim 1**, which was cited as being unpatentable over Ogura (European Patent Publication Number EP 0 768 582, cited in the Office action dated 1/15/04) in view of Ote *et al.* (U.S. Patent Number 5,815,652, cited in the Office action dated 1/15/04), wherein applicant argues on pages 8 and 9 that both Ogura and Ote fail to teach if the image forming devices are configured to detect a transmission fault from at

least one of a central service station and a communication control unit through a process periodically initiated by each of the image forming devices.

5. As discussed in the Office action dated 7/28/04, as the claims are currently worded, one of ordinary skill in the art can reasonably interpret the combination of Ogura and Ote as teaching of each of the image forming devices being configured to detect a transmission fault from at least one of the central service station and the communication control unit through a process periodically initiated by each of the image forming devices. Ogura teaches that each of the image forming devices (seen in Fig. 20, and column 22, line 39 through column 23, line 42) are configured to detect a transmission fault from at least one of the central service station and the communication control unit ("transmitted normally" or "reported normally?" in Figs. 21 and 22) over a predetermined period ("timer > 3 minutes" in Fig. 21 and "timer > 20 minutes" in Fig. 22). However, Ogura fails to expressly disclose if the *process is periodically initiated* by each of the image forming devices.

6. Ote is being utilized to teach of a similar periodically initiated process. Particularly, Ote teaches of a process that is periodically initiated by each of the image forming devices, as read in column 11, lines 39 through 49, and column 12, line 48 through column 13, line 1, wherein Ote shows of using a schedule, which is a periodically initiated process. Thus, Ote teaches of an image forming device, noted as the managing computer 23 or the remote managing computer 27, that receives a fault event from the agent 17, as seen in Fig. 13, thus detecting a transmission fault from at least one of the central service station and the communication control unit.

7. The applicant further argues on page 8, that the computers 23 or 27 are not image forming devices. The examiner notes that a computer can be considered an image forming

device, since an image can be formed within the device. While this is different than the copier than is described in the specification of the current application, the claims are worded so as to require "a plurality of image forming devices". With this, Ote shows of that the above feature occurs through a process periodically initiated by each of the image forming devices, whereby the managing computers 23 and 27 set and transmit schedule information for one year of preset power-off and power-on operating times of computer 10, thereby causing the computer 10, which includes the network adaptor 141 and the network driver 201, to operate at specified times, therein being a "process periodically initiated" by the managing computers.

8. Continuing, applicant argues on pages 8 and 9 that the faults detected in Ote are actually detected in the computer 10, and that the automatic operation management taught in Ote is unrelated to the detection of transmission faults. The examiner notes that faults are detected in the computer 10. However, as seen in Fig. 13, the fault logs are additionally transmitted to the remote managing computers 23 and 27. Thus, one of ordinary skill in the art can recognize that the managing computers 23 and 27 effectively detect faults of the computer 10 upon reception of the fault event log, where a fault warning is displayed on a screen.

9. The reference of Ote is being relied upon to teach of a **periodically initiated process**. As seen above, Ote teaches of a system that detects faults through a periodically initiated process. Because Ogura teaches all of the other features set forth in the claim, it would have been obvious to one of ordinary skill in the art to combine the periodically initiated process of Ote in the system of Ogura.

10. Therefore, the rejection of independent **claim 1**, as well as independent **claims 7, 30, and 36**, as cited in the Office action dated 7/28/04, under 35 U.S.C.103(a), as being unpatentable

over Ogura in view of Ote *et al.*, is maintained and repeated below. Further, for the same reasons discussed above, the rejection of dependent **claims 2-6 and 31-35** are also maintained and repeated below.

Claim Rejections - 35 USC § 103

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. **Claims 1-7 and 30-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogura (European Patent Publication Number EP 0 768 582, cited in the Office action dated 7/28/04) in view of Ote *et al.* (U.S. Patent Number 5,815,652, cited in the Office action dated 7/28/04).

Regarding ***claim 1***, Ogura discloses an image forming device management system including a plurality of image forming devices (copying machine PPC 1, seen in Fig. 5), a central service station for providing a maintenance service for the image forming devices (administrating device 16, see Fig. 5), and a communication control unit connected to each of the image forming devices by a signal line (communication control unit 18, seen in Fig. 5), the communication control unit (18) connecting one of the image forming devices (PPC 1) to the central service station (16) by a communication network (public line network 17, column 12, line 25 through column 13, line 12). Further, Ogura teaches that each of the image forming devices (see Fig. 20, column 22, line 39 through column 23, line 42) being configured to detect a transmission fault from at least one of the central service station and the communication control unit ("transmitted normally" or "reported normally?" in Figs. 21 and 22) over a predetermined

period ("timer > 3 minutes" in Fig. 21 and "timer > 20 minutes" in Fig. 22) and to display a signal line separation message ("failure of automatic reporting displayed") when the image forming device detects the transmission fault from at least one of the central service station and the communication control unit over the predetermined period (see Figs. 21 and 22, column 22, line 39 through column 23, line 42).

However, Ogura fails to expressly disclose if each of the image forming devices are configured to detect the transmission fault over a predetermined period *through a process periodically initiated by each of the image forming devices*.

Ote discloses an image forming device management system including a plurality of image forming devices (managing computer 23 and remote managing computer 27, see Figs. 1A and 1B), a central service station (agent 17, within the computer to be managed 10) for providing a maintenance service for the image forming devices (column 5, lines 40 through 52, and column 12, lines 7 through 36, wherein the agent 17 monitors the status of the network and line drivers of computer 10, which can be transmitted to the image forming devices, thereby being a "maintenance service" for the image forming devices), and a communication control unit (network OS 161) connected to each of the image forming devices by a signal line (see Figs. 1A and 1B), the communication control unit (network OS 161) connecting one of the image forming devices (managing computers 23 or 27) to the central service station (agent 17) by a communication network (LAN 22 or telephone line 25). Further, Ote teaches that each of the image forming devices (managing computer 23 and remote managing computer 27) being configured to detect a transmission fault from at least one of the central service station (agent 17) and the communication control unit (network OS 161, whereby a fault event of network adaptor

141 or network driver 201 is determined and sent to the managing computer, as seen in Figs. 12 and 13, column 7, line 48 through column 8, line 4, column 8, line 58 through column 9, line 21, and column 12, lines 7 through 47) through a process periodically initiated by each of the image forming devices (column 11, lines 39 through 49, and column 12, line 48 through column 13, line 1, wherein the automatic operation schedule setting means of the managing computers 23 and 27 sets and transmits schedule information for one year of preset power-off and power-on operating times of computer 10, thereby causing the computer 10, which includes the network adaptor 141 and the network driver 201, to operate at specified times, which is a "process periodically initiated" by the managing computers) and to display *a fault message* (fault log, which is displayed on the screen of the managing computer 23 or 27) when the image forming device detects the transmission fault from at least one of the central service station and the communication control unit over a predetermined period (column 13, lines 26 through 39, see Figs. 11 and 13).

Ogura & Ote are combinable because they are in the same field of endeavor, that being computer management systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the system of Ogura include the teachings of Ote. The suggestion/motivation for doing so would have been that Ogura's system would become more automated with the inclusion of Ote's teachings, since a user would be able to set when a remotely connected computer is operational, and be notified if any faults are determined in the connections, as recognized by Ote. Therefore, it would have been obvious to combine the system of Ogura with the teachings of Ote to obtain the invention as specified in claim 1.

Regarding ***claim 2***, Ogura and Ote disclose the system discussed above in claim 1, and Ogura further teaches that each of the image forming devices (column 22, line 39 through column 23, line 42) is configured to detect the transmission fault from the communication control unit over the predetermined period ("reported normally", seen in Figs. 21 and 22) based on a response of the image forming device to a selecting of the communication control unit to the image forming device ("reporting result report received?", seen in Figs. 21 and 22).

Regarding ***claim 3***, Ogura and Ote disclose the system discussed above in claim 1, and Ogura further teaches that each of the image forming devices (column 22, line 39 through column 23, line 42) is configured to detect the transmission fault from the central service station over the predetermined period ("reporting result report received?" and "timer > 3 minutes" or "timer > 20 minutes", seen in Figs. 21 and 22) based on a response of the image forming device to a selecting of the central service station to the image forming device (column 23, lines 3 through 23).

Regarding ***claim 4***, Ogura and Ote disclose the system discussed above in claim 1, and Ogura further teaches that each of the image forming devices (column 22, line 39 through column 23, line 42) is configured to detect the transmission fault from the communication control unit over the predetermined period ("reporting result report received?" and "timer > 3 minutes" or "timer > 20 minutes", seen in Figs. 21 and 22) based on a response of the image forming device to a polling of the communication control unit to the image forming device (column 25, lines 6 through 56).

Regarding ***claim 5***, Ogura and Ote disclose the system discussed above in claim 1, and Ogura further teaches that each of the image forming devices (column 22, line 39 through

column 23, line 42) includes a communication interface unit (communication interface unit 109, seen in Fig. 8) having a terminal connected to the communication control unit (see Fig. 8, column 14, lines 46 through 52), and each of the image forming devices is configured to detect the transmission fault from the communication control unit over the predetermined period ("reporting result report received?" and "timer > 3 minutes" or "timer > 20 minutes", seen in Figs. 21 and 22) based on a detected voltage of the terminal of the communication interface unit (column 18, lines 2 through 12).

Regarding ***claim 6***, Ogura and Ote disclose the system discussed above in claim 1, and Ogura further teaches that each of the image forming devices (column 22, line 39 through column 23, line 42) includes a connection detecting circuit (communication interface unit 109 and CPU 100) having an input connected to the communication control unit (see Fig. 8), and each of the image forming devices is configured to detect the transmission fault from the communication control unit over the predetermined period ("reporting result report received?" and "timer > 3 minutes" or "timer > 20 minutes", seen in Figs. 21 and 22) based on an output of the connection detecting circuit (column 22, line 53 through column 23, line 33).

Regarding ***claim 7***, Ogura discloses an image forming device management system including a plurality of image forming devices (copying machine PPC 1, seen in Fig. 5), a central service station for providing a maintenance service for the image forming devices (administrating device 16, see Fig. 5), and a communication control unit connected to each of the image forming devices by a signal line (communication control unit 18, seen in Fig. 5), the communication control unit (18) connecting one of the image forming devices (PPC 1) to the central service station (16) by a communication network (public line network 17, column 12, line

25 through column 13, line 12). Further, Ogura teaches that each of the image forming devices (see Fig. 20, column 22, line 39 through column 23, line 42) being configured to detect a transmission fault of the communication control unit ("transmitted normally" or "reported normally?" in Figs. 21 and 22) over a predetermined period ("timer > 3 minutes" in Fig. 21 and "timer > 20 minutes" in Fig. 22) and to display a signal line separation message ("failure of automatic reporting displayed") when the image forming device detects the transmission fault from the communication control unit over the predetermined period (see Figs. 21 and 22, column 22, line 39 through column 23, line 42), and wherein the display of the signal line separation message indicates a transmission fault along the signal line between the image forming device and the communication control unit (column 12, lines 1 through 24, and column 23, lines 3 through 23).

However, Ogura fails to particularly teach if each of the image forming devices are configured to detect the transmission fault over a predetermined period *through a process periodically initiated by each of the image forming devices.*

Ote discloses an image forming device management system including a plurality of image forming devices (managing computer 23 and remote managing computer 27, see Figs. 1A and 1B), a central service station (agent 17, within the computer to be managed 10) for providing a maintenance service for the image forming devices (column 5, lines 40 through 52, and column 12, lines 7 through 36, wherein the agent 17 monitors the status of the network and line drivers of computer 10, which can be transmitted to the image forming devices, thereby being a "maintenance service" for the image forming devices), and a communication control unit (network OS 161) connected to each of the image forming devices by a signal line (see Figs. 1A

and 1B), the communication control unit (network OS 161) connecting one of the image forming devices (managing computers 23 or 27) to the central service station (agent 17) by a communication network (LAN 22 or telephone line 25). Further, Ote teaches that each of the image forming devices (managing computer 23 and remote managing computer 27) being configured to detect a transmission fault of the communication control unit (network OS 161, whereby a fault event of network adaptor 141 or network driver 201 is determined and sent to the managing computer, as seen in Figs. 12 and 13, column 7, line 48 through column 8, line 4, column 8, line 58 through column 9, line 21, and column 12, lines 7 through 47) through a process periodically initiated by each of the image forming devices (column 11, lines 39 through 49, and column 12, line 48 through column 13, line 1, wherein the automatic operation schedule setting means of the managing computers 23 and 27 sets and transmits schedule information for one year of preset power-off and power-on operating times of computer 10, thereby causing the computer 10, which includes the network adaptor 141 and the network driver 201, to operate at specified times, which is a "process periodically initiated" by the managing computers) and to display *a fault message* (fault log, which is displayed on the screen of the managing computer 23 or 27) when the image forming device detects the transmission fault from the communication control unit over a predetermined period (column 13, lines 26 through 39, see Figs. 11 and 13), wherein the display of the *fault message* indicates a fault along the signal line between the image forming device and the communication control unit (column 12, lines 7 through 36).

Ogura & Ote are combinable because they are in the same field of endeavor, that being computer management systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the system of Ogura include the teachings of Ote. The

suggestion/motivation for doing so would have been that Ogura's system would become more automated with the inclusion of Ote's teachings, since a user would be able to set when a remotely connected computer is operational, and be notified if any faults are determined in the connections, as recognized by Ote. Therefore, it would have been obvious to combine the system of Ogura with the teachings of Ote to obtain the invention as specified in claim 7.

Regarding ***claim 30***, Ogura discloses an image forming device management system comprising a plurality of means for image forming (copying machine PPC 1, seen in Fig. 5), a maintenance service means provided for the plurality of means for image forming (administrating device 16, see Fig. 5), and a means for communicating and controlling, connected to each of the means for image forming by a signal line (communication control unit 18, seen in Fig. 5), the means for communicating and controlling (18) connecting one of the means for image forming (PPC 1) to the maintenance service means (16) by a communication network (public line network 17, column 12, line 25 through column 13, line 12). Further, Ogura teaches that each of the means for image forming (see Fig. 20, column 22, line 39 through column 23, line 42) being configured to detect a transmission fault from at least one of the maintenance service means and the means for communicating and controlling ("transmitted normally" or "reported normally?" in Figs. 21 and 22) over a predetermined period ("timer > 3 minutes" in Fig. 21 and "timer > 20 minutes" in Fig. 22) and to display a signal line separation message ("failure of automatic reporting displayed") when the means for image forming detects the transmission fault from at least one of the maintenance service means and the means for communicating and controlling over the predetermined period (see Figs. 21 and 22, column 22, line 39 through column 23, line 42).

However, Ogura fails to particularly teach if each of the means for image forming are configured to detect the transmission fault over a predetermined period *through a process periodically initiated by each of the means for image forming.*

Ote discloses an image forming device management system including a plurality of means for image forming (managing computer 23 and remote managing computer 27, see Figs. 1A and 1B), maintenance service means (agent 17, within the computer to be managed 10) provided for the plurality of means for image forming (column 5, lines 40 through 52, and column 12, lines 7 through 36, wherein the agent 17 monitors the status of the network and line drivers of computer 10, which can be transmitted to the image forming devices, thereby being a "maintenance service" for the image forming devices), and means for communicating and controlling (network OS 161), connected to each of the means for image forming by a signal line (see Figs. 1A and 1B), the means for communicating and controlling (network OS 161) connecting one of the means for image forming (managing computers 23 or 27) to the maintenance service means (agent 17) by a communication network (LAN 22 or telephone line 25). Further, Ote teaches that each of the means for image forming (managing computer 23 and remote managing computer 27) being configured to detect a transmission fault from at least one of the maintenance service means (agent 17) and the means for communicating and controlling (network OS 161, whereby a fault event of network adaptor 141 or network driver 201 is determined and sent to the managing computer, as seen in Figs. 12 and 13, column 7, line 48 through column 8, line 4, column 8, line 58 through column 9, line 21, and column 12, lines 7 through 47) through a process periodically initiated by each of the means for image forming (column 11, lines 39 through 49, and column 12, line 48 through column 13, line 1, wherein the

automatic operation schedule setting means of the managing computers 23 and 27 sets and transmits schedule information for one year of preset power-off and power-on operating times of computer 10, thereby causing the computer 10, which includes the network adaptor 141 and the network driver 201, to operate at specified times, which is a "process periodically initiated" by the managing computers) and to display a *fault message* (fault log, which is displayed on the screen of the managing computer 23 or 27) when the means for image forming detects the transmission fault from at least one of the maintenance service means and the means for communicating and controlling over a predetermined period (column 13, lines 26 through 39, see Figs. 11 and 13).

Ogura & Ote are combinable because they are in the same field of endeavor, that being computer management systems. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the system of Ogura include the teachings of Ote. The suggestion/motivation for doing so would have been that Ogura's system would become more automated with the inclusion of Ote's teachings, since a user would be able to set when a remotely connected computer is operational, and be notified if any faults are determined in the connections, as recognized by Ote. Therefore, it would have been obvious to combine the system of Ogura with the teachings of Ote to obtain the invention as specified in claim 30.

Regarding ***claim 31***, Ogura and Ote disclose the system discussed above in claim 30, and Ogura further teaches that each of the means for image forming (column 22, line 39 through column 23, line 42) is configured to detect the transmission fault from the means for communicating and controlling over the predetermined period ("reported normally", seen in Figs. 21 and 22) based on a response of the means for image forming to a selecting of the means

for communicating and controlling to the means for image forming ("reporting result report received?", seen in Figs. 21 and 22).

Regarding ***claim 32***, Ogura and Ote disclose the system discussed above in claim 30, and Ogura further teaches that each of the means for image forming (column 22, line 39 through column 23, line 42) is configured to detect the transmission fault from the maintenance service means over the predetermined period ("reporting result report received?" and "timer > 3 minutes" or "timer > 20 minutes", seen in Figs. 21 and 22) based on a response of the means for image forming to a selecting of the maintenance service means to the means for image forming (column 23, lines 3 through 23).

Regarding ***claim 33***, Ogura and Ote disclose the system discussed above in claim 30, and Ogura further teaches that each of the means for image forming (column 22, line 39 through column 23, line 42) is configured to detect the transmission fault from the means for communicating and controlling over the predetermined period ("reporting result report received?" and "timer > 3 minutes" or "timer > 20 minutes", seen in Figs. 21 and 22) based on a response of the means for image forming to a polling of the means for communicating and controlling to the means for image forming (column 25, lines 6 through 56).

Regarding ***claim 34***, Ogura and Ote disclose the system discussed above in claim 30, and Ogura further teaches that each of the means for image forming (column 22, line 39 through column 23, line 42) includes a communication interface unit (communication interface unit 109, seen in Fig. 8) having a terminal connected to the means for communicating and controlling (see Fig. 8, column 14, lines 46 through 52), and each of the means for image forming is configured to detect the transmission fault from the means for communicating and controlling over the

predetermined period ("reporting result report received?" and "timer > 3 minutes" or "timer > 20 minutes", seen in Figs. 21 and 22) based on a detected voltage of the terminal of the communication interface unit (column 18, lines 2 through 12).

Regarding ***claim 35***, Ogura and Ote disclose the system discussed above in claim 30, and Ogura further teaches that each of the means for image forming (column 22, line 39 through column 23, line 42) includes a connection detecting circuit (communication interface unit 109 and CPU 100) having an input connected to the means for communicating and controlling (see Fig. 8), and each of the means for image forming is configured to detect the transmission fault from the means for communicating and controlling over the predetermined period ("reporting result report received?" and "timer > 3 minutes" or "timer > 20 minutes", seen in Figs. 21 and 22) based on an output of the connection detecting circuit (column 22, line 53 through column 23, line 33).

Regarding ***claim 36***, Ogura discloses a means for image forming management including a plurality of means for image forming (copying machine PPC 1, seen in Fig. 5), a maintenance service means provided for the means for image forming (administrating device 16, see Fig. 5), and a means for communicating and controlling connected to each of the means for image forming by a signal line (communication control unit 18, seen in Fig. 5), the means for communicating and controlling (18) connecting one of the means for image forming (PPC 1) to the maintenance service means (16) by a communication network (public line network 17, column 12, line 25 through column 13, line 12). Further, Ogura teaches that each of the means for image forming (see Fig. 20, column 22, line 39 through column 23, line 42) being configured to detect a transmission fault from the means for communicating and controlling ("transmitted

normally" or "reported normally?" in Figs. 21 and 22) over a predetermined period ("timer > 3 minutes" in Fig. 21 and "timer > 20 minutes" in Fig. 22) and to display a signal line separation message ("failure of automatic reporting displayed") when the means for image forming detects the transmission fault from the means for communicating and controlling over the predetermined period (see Figs. 21 and 22, column 22, line 39 through column 23, line 42).

However, Ogura fails to particularly teach if each of the means for image forming are configured to detect the transmission fault over a predetermined period *through a process periodically initiated by each of the means for image forming.*

Ote discloses an image forming device management system including a plurality of means for image forming (managing computer 23 and remote managing computer 27, see Figs. 1A and 1B), maintenance service means (agent 17, within the computer to be managed 10) provided for the plurality of means for image forming (column 5, lines 40 through 52, and column 12, lines 7 through 36, wherein the agent 17 monitors the status of the network and line drivers of computer 10, which can be transmitted to the image forming devices, thereby being a "maintenance service" for the image forming devices), and means for communicating and controlling (network OS 161), connected to each of the means for image forming by a signal line (see Figs. 1A and 1B), the means for communicating and controlling (network OS 161) connecting one of the means for image forming (managing computers 23 or 27) to the maintenance service means (agent 17) by a communication network (LAN 22 or telephone line 25). Further, Ote teaches that each of the means for image forming (managing computer 23 and remote managing computer 27) being configured to detect a transmission fault from the means for communicating and controlling (network OS 161, whereby a fault event of network adaptor

141 or network driver 201 is determined and sent to the managing computer, as seen in Figs. 12 and 13, column 7, line 48 through column 8, line 4, column 8, line 58 through column 9, line 21, and column 12, lines 7 through 47) through a process periodically initiated by each of the means for image forming (column 11, lines 39 through 49, and column 12, line 48 through column 13, line 1, wherein the automatic operation schedule setting means of the managing computers 23 and 27 sets and transmits schedule information for one year of preset power-off and power-on operating times of computer 10, thereby causing the computer 10, which includes the network adaptor 141 and the network driver 201, to operate at specified times, which is a "process periodically initiated" by the managing computers) and to display a *fault message* (fault log, which is displayed on the screen of the managing computer 23 or 27) when the means for image forming detects the transmission fault from the means for communicating and controlling over a predetermined period (column 13, lines 26 through 39, see Figs. 11 and 13).

Ogura & Ote are combinable because they are in the same field of endeavor, that being computer management systems.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the system of Ogura include the teachings of Ote. The suggestion/motivation for doing so would have been that Ogura's system would become more automated with the inclusion of Ote's teachings, since a user would be able to set when a remotely connected computer is operational, and be notified if any faults are determined in the connections, as recognized by Ote. Therefore, it would have been obvious to combine the system of Ogura with the teachings of Ote to obtain the invention as specified in claim 36.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (571) 272-7410. The examiner can normally be reached on Monday-Friday, 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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